Pre-Medicine

Physicians are on the front line of medicine. As practitioners, they work in solo or group practices examining patients and obtaining medical histories; ordering, performing and interpreting diagnostic tests; and prescribing and administering treatment for patients suffering from injury or disease. They also counsel patients about illness, injuries, health conditions and preventive healthcare (diet/fitness, smoking cessation, etc.).

In hospitals, they provide emergency care, perform surgery and care for patients with injuries or life-threatening illnesses like cancer or serious conditions like asthma. In laboratories across the country, physician researchers look for the cause of illnesses and for new and better ways to treat all kinds of diseases and injuries. They run medical centers and teach future generations of physicians and other health care practitioners.

It’s an exciting and rewarding career and it’s also a broad one, which is why physicians choose a specialty during their training. Specialties include: Anesthesiology, Cardiovascular medicine, Dermatology, Emergency medicine, Family medicine, Internal medicine, Neurology, Oncology, Orthopedics, Pediatrics, Psychiatry, Radiation oncology, Sports medicine, and Surgery.

Individuals interested in becoming a physician can choose from two paths—getting your doctor of medicine (M.D.) degree or getting a doctor of osteopathic medicine (D.O.) degree. While the end result is the same—a career as a physician—the training and education are different. Osteopathic medical schools incorporate Osteopathic Manipulative Treatment (OMT) within their medical education and students are eligible to participate in all the same specialties offered by allopathic medical schools.

Medical schools utilize a holistic review process on applicants that allows for the assessment of an applicant’s capabilities while balancing experience, attributes, and academic metrics. Therefore, students must prepare for medical school in multiple ways beyond academics. Competitive applicants will often have experience volunteering or working in a healthcare setting, participating in laboratory research, job shadowing, holding leadership positions, tutoring or studying abroad.

### Core Pre-Requisites
- Biology: BIO 1120 & 1150
- Physics: PHY 1110 & 1120
- Chemistry: CHM 1210 & 1220
- O-Chemistry: CHM 2110 & 2120
- English: ENG 1100 & 2100
- Biochemistry: BMB 4210 & 4230 (by 2020 for BSOM)

### Strongly recommended by most medical schools
- Mathematics: MTH 2240 or STT 2640
- Human A&P: ANT 3100 & 3120
Students have their best chance of getting accepted to medical schools in the state of Ohio, as long as they are Ohio residents. Ohio is fortunate to have seven medical schools, six grant the MD degree and one grants the DO degree.

**Ohio Medical Schools**
- Case Western Reserve University
- Northeastern Ohio/NeoMed
- The Ohio State University
- Ohio University
- University of Cincinnati
- University of Toledo
- Wright State University Boonshoft School of Medicine

**Statistics for Ohio Medical Applicants for the 2014 Entering Class**
- Total Applications: 1,744
- Total Matriculants: 798
- Average GPA: 3.58
- Science GPA: 3.47

**Choice of Major**
Unbeknownst to many college students, there is no such thing as the “best” major for those bound for medical school. In fact, no medical school requires a specific major for its applicants. Even so, many students choose to major in a scientific discipline because they are fascinated by science and believe that such a major will be the foundation for a variety of career options. However, this does not enhance your chances for admissions. Admissions committees welcome students whose intellectual curiosity leads them to a wide variety of disciplines, including social sciences, liberal arts, business, engineering and humanities.

**Competitive Applicants Have:**
- GPA of at least 3.5; science GPA near 3.5
- MCAT scores above 500 (508 to be competitive)
- Healthcare experience
- Community Service / volunteering
- Involvement in extracurricular activities
- Strong letters of evaluation
- Outgoing personality, leadership skills, compassion, empathy, team skills and integrity

**What is the MCAT?**
Simply put, the MCAT (Medical Colleges Admissions Test) exam helps admissions officers identify which students are likely to succeed in medical school. In April 2015, the AAMC launched the New MCAT exam. The exam has been updated to reflect changes in medicine and science and to test examinees on not only what they know but how well they use what they know. The exam is structured in the following format:

- Biological and Biochemical Foundations of Living Systems
- Chemical and Physical Foundations of Living Systems
- Psychological, Social, and Biological Foundations of Behavior
- Critical Analysis and Reasoning Skills

You will receive five scores from your MCAT exam: one for each of the four sections and one combined score. Each of the four sections is scored from a low of 118 to a high of 132. The total score ranges from 472 to 526. Almost all U.S. medical schools require you to submit MCAT exam scores. Many schools do not accept MCAT scores that are more than three years old.

To prepare for this exam, students are strongly recommended to complete additional courses in psychology, sociology, molecular/cell biology,